

**INITIAL STATEMENT OF REASONS  
FOR  
PROPOSED BUILDING STANDARDS  
OF THE  
OFFICE OF THE STATE FIRE MARSHAL**

**REGARDING THE 2019 CALIFORNIA BUILDING CODE,  
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PART 2**

**TRIENNIAL RULEMAKING CODE CYCLE**

The Administrative Procedure Act (APA) requires that an Initial Statement of Reasons be available to the public upon request when rulemaking action is being undertaken. The following information required by the APA pertains to this particular rulemaking action:

**STATEMENT OF SPECIFIC PURPOSE, PROBLEM, RATIONALE and BENEFITS:**

(Government Code Section 11346.2(b)(1)) requires a statement of specific purpose of each adoption, amendment, or repeal and the problem the agency intends to address and the rationale for the determination by the agency that each adoption, amendment, or repeal is reasonably necessary to carry out the purpose and address the problem the agency intends to address for which it is proposed. The statement shall enumerate the benefits anticipated from the regulatory action, including the benefits or goals provided in the authorizing statute.)

Health and Safety Code Section 18928:

The specific purpose of this rulemaking effort by the Office of the State Fire Marshal is to act accordance with Health and Safety Code section 18928, which requires all proposed regulations to specifically comply with this section in regard to the adoption by reference with amendments to a model code within one year after its publication.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies addressed in the 2018 International Building Code and be published as the 2019 California Building Code.

The general purpose of this proposed action is principally intended to update and codify a new edition of the California Building Code (California Code of Regulations, Title 24, Part 2) based upon a more current edition of a model code. The current California Building Code in effect is the 2016 California Building Code which is based upon the 2015 International Building Code of the International Code Council. This proposed action:

- Repeal the adoption by reference of the 2015 International Building Code and incorporate and adopt by reference in its place the 2018 International Building Code for application and effectiveness in the 2019 California Building Code.
- Repeal certain amendments to the 2015 International Building Code and/or California Building Standards not addressed by the model code that are no longer necessary.
- Adopt new building standards or necessary amendments to the 2018 International Building Code that address inadequacies of the 2018 International Building Code as they pertain to California laws.
- Bring forward previously existing California building standards or amendments, which represent no change in their effect from the 2016 California Building Code.
- Codify non-substantive editorial and formatting amendments from the format based upon the 2015 International Building Code to the format of the 2018 International Building Code.

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**NOTE OF EXPLANATION:**

For the **2018 Triennial Code Adoption Cycle**, the Express Terms are displayed as follows:

**\*\*PART 1\*\*** Includes the California Amendments SFM proposes to bring forward from the 2016 California Building Code **with changes** as shown, and also identifies the model code standards from the 2018 International Building Code SFM proposes for adoption into the 2019 California Building Code.

**\*\*PART 2\*\*** Displays the standards SFM proposes to bring forward from the 2016 California Building Code **without change**, except for non-substantive editorial corrections, for adoption into the 2019 California Building Code; the text is provided for context and the convenience of the code user.

### **SUMMARY OF REGULATORY ACTION**

#### **SFM PROPOSES TO:**

##### **\*\*PART 1\*\***

1. Bring forward existing California Amendments from the 2016 California Building Code for adoption into the 2019 California Building Code **with amendment**.
2. Adopt standards from the 2018 International Building Code into the 2019 California Building Code **without amendment**.
3. Adopt standards from the 2018 International Building Code into the 2019 California Building Code **with amendment**.
4. Repeal 2016 California Amendments, which are not brought forward into the 2019 California Building Code.

##### **\*\*PART 2\*\***

1. Bring forward existing California Amendments from the 2016 California Building Code for adoption into the 2019 California Building Code **without amendment**, except for editorial corrections.

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##### **\*\*PART 1\*\***

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#### **[Item 1. California amendments, updates and errata by chapter]**

##### **CHAPTER 1**

##### **SCOPE AND ADMINISTRATION**

###### **1.1.1**

###### **1.11.1**

###### **1.11.6**

**Rationale:** The SFM is proposing to repeal the adoption by reference of the 2018 International Building Code and incorporate and adopt by reference in its place the 2018 International Building Code for application and effectiveness in the 2019 California Building Code. Furthermore, SFM is co-adopting updates to sections in Division I being proposed by BSC and HCD.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property

against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **DIVISION II SCOPE AND ADMINISTRATION**

The SFM proposes to maintain the Division II designation for the IBC Chapter 1 Administrative provisions - Sections 101 through 114.

The SFM proposes to only adopt Sections 105.2.1 – 105.2.2, 105.3 – 105.3.1, 105.4, 105.6 – 105.7, 106.1, 106.2 – 106.3, 107.1 – 107.3, 107.4, 107.5, 108.1 – 108.4, 110.1 – 110.3, 110.3.4 – 110.3.6, 110.3.8 – 110.3.10, 110.4 – 110.6, 111.1, 111.2, 111.3 – 111.4, 112, 114.1 – 114.2, 115 and 116 contained in Chapter 1, Division II pursuant to Health and Safety Code Sections 13108, 13113, 13114, 13131.5, 13143, 13143.6, 17921 and 18949.2.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 2 DEFINITIONS**

The SFM proposes to adopt Chapter 2 with amendment and California regulation. Furthermore, the SFM is maintaining the adoption of those existing California definitions or model code definitions as amended in Chapter 2 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

**CARE AND SUPERVISION.**

**CLIMATE ZONE.**

**COMMON USE**

**COMMUNITY CARE FACILITY.**

**CONGREGATE LIVING HEALTH FACILITY (CLHF).**

~~**[BG] CONGREGATE LIVING FACILITIES.**~~

**FIREWORKS.**

~~**FOSTER CARE FACILITIES.**~~

~~**HEAVY TIMBER [SFM]**~~

**HIGH-RISE BUILDING.**

~~**[F] LABORATORY SUITE.**~~

**MOTION PICTURE AND TELEVISION PRODUCTION STUDIO SOUND STAGES, APPROVED PRODUCTION FACILITIES AND PRODUCTION LOCATIONS.**

**ORGANIZED CAMPS.**

**RESIDENTIAL CARE FACILITY FOR THE ELDERLY (RCFE).**

**SMALL MANAGEMENT YARD.**

**WILDLAND URBAN INTERFACE AREA (WUI). [SFM]**

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property

against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 3**

### **USE AND OCCUPANCY CLASSIFICATIONS**

The SFM proposes to adopt Chapter 3 with amendment and California regulation. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 3 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

**302.1**  
**304.1**  
**307.1.1**  
**308.1**  
**308.3**  
~~**308.3.1.1**~~  
~~**308.3.1.2**~~  
~~**308.3.2.1**~~  
~~**308.4.2**~~ **308.3.3**  
**308.4.6**  
**308.5.2**  
**308.5.3**  
**308.5.4**  
**310.4**  
~~**310.4.1**~~  
**310.4.1**  
**310.5**  
~~**310.5.1**~~  
~~**310.5.2**~~

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 4**

### **SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY**

The SFM proposes to adopt Chapter 4 with amendment and California regulation. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 4 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

**403.1**  
~~**403.1.1**~~  
**403.2.1.1**

403.3.2  
~~403.3.2.1~~  
403.3.3  
406.6.2  
407.2.6  
407.5.1  
407.5.2  
~~407.5.43~~  
~~407.5.2~~  
407.5.4  
~~407.5.35~~  
407.6  
~~407.67~~  
~~407.78~~  
~~407.89~~  
407.910  
~~407.4011~~  
~~407.4412~~  
~~408.1.1~~  
~~408.1.2.2~~  
~~408.9.1~~  
415.5.4  
415.11.7  
415.11.7.1  
415.11.7.1.2  
415.11.7.1.3  
415.11.7.1.4  
415.11.7.2  
415.12  
415.12.1  
415.12.1.4  
415.13  
415.13.2  
415.13.3  
~~420.7~~  
~~420.8~~  
~~420.8.1~~  
420.9  
420.10  
420.10.1  
421.1, ~~421.2~~, 421.2, 421.2, 421.3, 421.3.1, 421.3.2, 421.4, 421.5, 421.5.1, 421.5.2, 421.6, 421.7  
[Remove existing amendments to Section 421.1 through 421.7. Model code now matches old CA amendments.]  
435.3.3  
435.3.4  
435.8.7  
450.5.1  
435.3.3  
455.8

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

## **CHAPTER 5 GENERAL BUILDING HEIGHTS AND AREAS**

The SFM proposes to maintain the adoption Chapter 5 without modification. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 5 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 6 TYPES OF CONSTRUCTION**

The SFM proposes to maintain the adoption Chapter 6 without modification. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 6 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 7 FIRE-RESISTANCE-RATED CONSTRUCTION**

The SFM proposes to adopt Chapter 7 with amendment and California regulation. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 7 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 7A MATERIALS AND CONSTRUCTION METHODS FOR EXTERIOR WILDFIRE EXPOSURE [SFM]**

The SFM proposes to maintain the adoption Chapter 7A without modification. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 7A without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## CHAPTER 8 INTERIOR FINISHES

The SFM proposes to maintain the adoption Chapter 8 without modification. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 8 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## CHAPTER 9 FIRE PROTECTION SYSTEMS

The SFM proposes to adopt Chapter 9 with amendment and California regulation. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 9 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

### TABLE 903.2.11.6

903.4.3

905.3.1

907.2.4312

907.2.4312.1

907.5.2.2

907.6.4.2

911.1

904.12

904.13

907.2.5.1

*[The State Fire Marshal's Office is proposing to delete the CA amendments and adopt the model text of Section 916]*

~~916.1, 916.2, 916.3, 916.4, 916.5, 916.6, 916.7, 916.8, 916.9, 916.10, 916.11~~

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

## **CHAPTER 10 MEANS OF EGRESS**

The SFM proposes to adopt Chapter 10 with amendment and California regulation. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 10 without modification

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

### **TABLE 1004.1.2 ~~1004.8~~**

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 11 ACCESSIBILITY**

The SFM proposes to not adopt Chapter 11.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 11A HOUSING ACCESSIBILITY**

The SFM proposes to not adopt Chapter 11A.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 11B ACCESSIBILITY TO PUBLIC BUILDINGS, PUBLIC ACCOMMODATIONS, COMMERCIAL BUILDINGS AND PUBLICLY FUNDED HOUSING**

The SFM proposes to not adopt Chapter 11B.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.



## **CHAPTER 12 INTERIOR ENVIRONMENT**

The SFM proposes to only adopt Sections 1202.5.2, 1202.6, 1205, 1207 and 1208 of Chapter 12 without modification. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 12 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 13 ENERGY EFFICIENCY**

The SFM proposes to not adopt Chapter 13.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 14 EXTERIOR WALLS**

The SFM proposes to only adopt Sections 1401, 1402.4, 1402.5, 1403, 1404, 1405, 1406 and 1407, 1408 of Chapter 14 without amendment.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 15 ROOF ASSEMBLIES AND ROOFTOP STRUCTURES**

The SFM proposes to only adopt Sections 1501, 1505, 1506, 1507, 1509, 1510 and 1512 of Chapter 15 with amendment. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 15 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the

2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 16**

### **STRUCTURAL DESIGN**

The SFM proposes to not adopt Chapter 16.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 16A**

### **STRUCTURAL DESIGN**

The SFM proposes to not adopt Chapter 16A.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 17**

### **STRUCTURAL TESTS AND SPECIAL INSPECTIONS**

The SFM proposes to only adopt Sections 1705.1, 1705.1.1 and 1705.14 through 1705.18.2, 1709.6 of Chapter 17 without amendment.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 18**

### **SOILS AND FOUNDATIONS**

## **CHAPTER 19**

### **CONCRETE**

## **CHAPTER 20**

### **ALUMINUM**

The SFM proposes to not adopt Chapters 18 through 20.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 21 MASONRY**

The SFM proposes to only adopt Sections 2113.9.2 of Chapter 21 without modification. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 21 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 21A MASONRY**

The SFM proposes to only adopt Sections 2113A.9.2 of Chapter 21A without modification. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 21 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 22 STEEL**

### **~~CHAPTER 22A~~ STEEL**

The SFM proposes to not adopt Chapter 22 and 22A.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 23 WOOD**

The SFM proposes to only adopt Sections 2303.2 – 2303.2.9 of Chapter 23 without amendment

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 24**

### **GLASS AND GLAZING**

The SFM proposes to adopt Chapter 24 without amendment.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 25**

### **GYPSUM BOARD AND PLASTER**

The SFM proposes to not adopt Chapter 25.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 26**

### **PLASTIC**

The SFM proposes to adopt Chapter 26 without modification. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 26 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 27**

### **ELECTRICAL**

The SFM proposes to adopt Chapter 27 with amendment and California regulation. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 27 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

**2702.2.911**

Rationale:

Correlation with definition of a high-rise in the California Health and Safety Code

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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**CHAPTER 28  
MECHANICAL SYSTEMS**

The SFM proposes to adopt Chapter 28 without modification. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 28 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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**CHAPTER 29  
PLUMBING SYSTEMS**

The SFM proposes to not adopt Chapter 29.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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**CHAPTER 30  
ELEVATORS AND CONVEYING SYSTEMS**

The SFM proposes to adopt Chapter 30 with amendment and California regulation. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 30 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

**3001.56**

**3005.4.1**  
**3006.3**

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 31**

### **SPECIAL CONSTRUCTION**

The SFM proposes to only adopt Sections 3101, 3102.1, 3102.3.1, 3103, 3104, 3105.1- 3105.3, 3106, 3110, 3111, 3112 and 3113 of Chapter 31 with amendment and California regulation. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 31 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

**3111.1.1**  
**3111.1.1**  
**3111.1.2**  
**3111.2**  
**3111.2.1**  
**3111.3.4**  
**3111.2.13.4.1**  
**3111.2.2.6 3.4.1.2**  
**3111.2.33.4.2**  
**3111.2.3.13.4.2.1**  
**3111.2.3.23.4.2.2**  
**3111.2.3.33.4.2.3**  
**3111.2.3.43.4.2.4**  
**3111.3.5**  
**3111.3.5.1**

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 32**

### **ENCROACHMENT INTO PUBLIC RIGHT-OF-WAY**

The SFM proposes to adopt Chapter 32 without amendment.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property

against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 33 SAFEGUARDS DURING CONSTRUCTION**

The SFM proposes to adopt Chapter 33 without amendment. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 33 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **CHAPTER 34 RESERVED**

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## **CHAPTER 35 REFERENCED STANDARDS**

The SFM proposes to adopt Chapter 35 with amendment and California regulation. Furthermore, the SFM is maintaining the adoption of those existing California amendments or building standards in Chapter 35 without modification.

(Note: See Part 2 of this document for existing California amendments brought forward from the 2016 California Building Code for adoption into the 2019 California Building Code without change except for non-substantive editorial corrections.)

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

**Rationale:** SFM is proposing to repeal existing amendments to now match the same edition of reference standard that IBC/IFC adopts. The repealed amendments are now the same editions or newer editions by using model code language.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **APPENDIX A EMPLOYEE QUALIFICATIONS**

## **APPENDIX B BOARD OF APPEALS**

The SFM proposes to not adopt Appendix A and B.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property

against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **APPENDIX C**

### **GROUP U – AGRICULTURAL BUILDINGS**

The SFM proposes to adopt Appendix C without amendment.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **APPENDIX D**

### **FIRE DISTRICTS**

## **APPENDIX E**

### **SUPPLEMENTARY ACCESSIBILITY REQUIREMENTS**

## **APPENDIX F**

### **RODENT PROOFING**

## **APPENDIX G**

### **FLOOD RESISTANT CONSTRUCTION**

## **APPENDIX H**

### **SIGNS**

The SFM proposes to not adopt Appendix D through H.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **APPENDIX I**

### **PATIO COVERS**

The SFM proposes to only adopt Sections 1101, I102, and I103 of Appendix I without amendment.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **APPENDIX J**

### **GRADING**

The SFM proposes to not adopt Appendix J.



The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **APPENDIX K**

### **Administrative Provisions**

The SFM proposes to not adopt Appendix K.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **APPENDIX L**

### **Earthquake Recording Instrumentation**

The SFM proposes to not adopt Appendix L.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **APPENDIX M**

### **Tsunami-Generated Flood Hazard**

The SFM proposes to not adopt Appendix M.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **APPENDIX N**

### **Replicable Buildings**

The SFM proposes to not adopt Appendix N.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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## **[Item 2. WUI Work Group]**

The OSFM is proposing the modifications based on the recommendations of the WUI /7A Taskforce.

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

### **701A.3**

#### **702A Heavy Timber definition**

##### **704A.3.1**

##### **705A.2**

##### **707A.3**

##### **707A.8**

##### **707A.9**

##### **708A.2.3**

##### **708A.4**

##### **709A.4.2**

##### **709A.5**

##### **710A.2**

### **701A.3**

**Rationale:** The Wildland-Urban Interface (WUI) regulations were created to provide a level of protection in the fire severity zone. The WUI workgroup did not consider the Group C building during the creation of the WUI regulations.

The “C” occupancy is a special occupancy that is defined in the Health and Safety Code section 18897. The law created this occupancy for camps used for an outdoor group living experience. The special buildings defined in CBC 450.4.1 limited to one story and a maximum of any lateral dimension of 25 feet. In many camps, these are basically wood tents with open window spaces, that have tarp coverings. It is impractical to building these structures to be compliant with the CBC 7A building requirements. The WUI construction would interfere with the intent of the statute and limit the outdoor living experience.

This proposal is to exempt only the small special sleeping buildings found in CBC 450.4.1. The larger buildings in the camp would be required to comply with the WUI standards. This would maintain a level of fire protection where the campers gather and congregate.

### **702A Heavy Timber definition**

**Rationale:** This proposal is to remove the heavy timber definition from 7A, because it creates confusion with 601 Types of construction. No regulation change.

### **704A.3.1**

**Rationale:** This proposal is simple clarification and will not require any additional testing and will not require any additional listing.

All testing laboratories who are asked to conduct the “extended ASTM E84 test” provide sentences equivalent to the proposed new section 704.A.3.1 in their report. A typical statement is: “The flame front shall not progress more than 10.5 ft (3.2 m) beyond the centerline of the burners at any time during the 30-minute test period. This is considered evidence of no significant progressive combustion in this test method.” ASTM E84 is a 10-minute test period and is silent on the requirements for 30-minute testing. The “added” criterion of “no evidence of significant progressive combustion” can be used as a “barrier” to the introduction of new materials.

This proposal simply explains that the requirement for “no evidence of significant progressive combustion” is duplicative because it is undefined and the only evidence as to how to measure it is contained in ASTM E2768. Fire testing labs have used as the corresponding criterion that the flame front in the ASTM E84 test does not progress more than 10.5 ft. beyond the centerline of the burners in either the 10-minute test or the continuation of the test for an additional 20 minutes (for a total of 30 minutes).

The “extended ASTM E84 test” is used in the IBC, the IRC, the IFC, the IMC and the IWUIC. It is also used in NFPA codes (NFPA 101, Life Safety Code and NFPA 5000, Building Code) and in NFPA 703 (“Standard for Fire Retardant–Treated Wood and Fire-Retardant Coatings for Building Materials”). It is also used in AC 66 (Acceptance Criteria for Fire-Retardant Treated Wood). However, neither in any of the ICC codes nor in any NFPA code or standard nor in AC 66 nor in ASTM E84 is there any description or guidance for what constitutes “no evidence of significant progressive combustion”. However, there is one standard that contains the criterion for the assessment of “no evidence of significant

progressive combustion". That standard is ASTM E2768 "Standard Test Method for Extended Duration Surface Burning Characteristics of Building Materials (30 min Tunnel Test)".

It has been stated that AC 66 (Acceptance Criteria for Fire-Retardant Treated Wood) describes the way in which "no evidence of significant progressive combustion" is assessed. The June 2012 edition of AC 66 states as follows, in sections 3.1.4 and 3.2.4, which is the same language used in the codes, namely:

"3.1.4 Surface Burning Characteristics The surface burning characteristics (flame spread and smoke-developed index) shall be determined in accordance with ASTM E 84 or UL 723. The flame spread index shall be 25 or less and there shall be no evidence of significant progressive combustion when the test is continued for an additional 20-minute period. Additionally, the flame front shall not progress more than 10½ feet (3200 mm) beyond the centerline of the burners at any time during the test. The smoke-developed index shall be 450 or less. For recognition of exterior use, tests shall be conducted both before and after durability tests conducted in accordance with Section 3.1.3. The FRT lumber shall meet the requirements of IBC Section 2303.2, IRC Section R802.1.3, UBC Section 207, SBC Section 202, or BNBC 2310.2, as applicable."

"3.2.4 Surface Burning Characteristics The surface burning characteristics (flame spread and smoke-developed index) shall be determined in accordance with ASTM E 84 or UL 723. The flame spread index shall be 25 or less and there shall be no evidence of significant progressive combustion when the test is continued for an additional 20-minute period. Additionally, the flame front shall not progress more than 10½ feet (3200 mm) beyond the centerline of the burners at any time during the test. The smoke-developed index shall be 450 or less. For recognition of exterior use, tests shall be conducted both before and after durability tests conducted in accordance with Section 3.2.3. The FRT plywood shall meet the requirements of Section 2303.2 of the IBC or Section R802.1.3 of the IRC, UBC Section 207, SBC Section 202, or BNBC Section 2310.2, as applicable."

No means has been proposed in any document other than in ASTM E2768 as to what constitutes "no evidence of significant progressive combustion". Note that ASTM E2768 applies to any material or product and not just to wood. The scope of ASTM E2768 includes the following statement: "The purpose of this fire-test-response standard is to evaluate the ability of a product to limit the surface spread of flame when evaluated for 30 min. This fire-test-response standard uses the apparatus and procedure of Test Method E84 with the total test period extended to 30 min."

The conditions of classification of ASTM E2768 include the following criteria:

1. The flame spread index shall be 25 or less as determined for the initial 10 min test period,
2. The flame front shall not progress more than 10.5 ft (3.2 m) beyond the centerline of the burners at any time during the 30-minute test period. This is considered evidence of no significant progressive combustion in this test method.

## 705A.2

### Rationale:

Currently, the section is slightly confusing as written and should be made clearer. Note that it is not the air space that is to have the layer of cap sheet but the roof covering assembly. Also, the roof covering assembly is what needs to resist the intrusion of flames and embers and not the air space. Also, the use of roof covering assemblies that meet a Class A as constructed with the air space, should be permitted also. For information, the present language and the IWUIC language are shown.

### CBC 7A WUI – Present wording

705A.2 Roof coverings. Where the roof profile allows a space between the roof covering and roof decking, the spaces shall be constructed to resist the intrusion of flames and embers, be firestopped with approved materials or have one layer of minimum 72 pound (32.4 kg) mineral-surfaced nonperforated cap sheet complying with ASTM D3909 installed over the combustible decking.

### IWUIC Code

504.2 Roof covering. Roofs shall have a roof assembly that complies with a Class A rating when tested in accordance with ASTM E108 or UL 790. For roof coverings where the profile allows a space between the roof covering and roof decking, the space at the eave ends shall be firestopped to preclude entry of flames or embers, or have one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 installed over the combustible decking.

#### Exceptions:

1. Class A roof assemblies include those with coverings of brick, masonry or an exposed concrete roof

deck.

2. Class A roof assemblies also include ferrous or copper shingles or sheets, metal sheets and shingles, clay or concrete roof tile or slate installed on noncombustible decks or ferrous, copper or metal sheets installed without a roof deck on noncombustible framing.

3. Class A roof assemblies include minimum 16 oz./sq. ft. (0.0416 kg/m<sup>2</sup>) copper sheets installed over combustible decks.

504.2.1 Roof valleys. Where provided, valley flashings shall be not less than 0.019-inch (0.48 mm) (No. 26 galvanized sheet gage) corrosion-resistant metal installed over a minimum 36-inch-wide (914 mm) underlayment consisting of one layer of 72-pound (32.4 kg) mineral-surfaced, nonperforated cap sheet complying with ASTM D3909 running the full length of the valley.

### 707A.3

**Rationale:** The proposal to remove the definition effects the code section 707A.3 requirements. To clarify the intent of the requirement; the language of the WUI /7A meaning of heavy timber is written out. No regulation change.

### 707A.8

**Rationale:** The proposal to remove the definition effects the code section 707A.8 exception. To clarify the intent of the requirement; the language of the WUI /7A meaning of heavy timber is written out. No regulation change.

### 707A.9

**Rationale:** The proposal to remove the definition effects the code section 707A.9 exception. To clarify the intent of the requirement; the language of the WUI /7A meaning of heavy timber is written out. No regulation change.

### 708A.2.3

**Rationale:** This recommendation is to prohibit operable skylights in the Very High Fire Hazard Severity Zone (VHFHSZs) for new construction and where more than 50% of an existing covering be altered, repaired or replaced. Exceptions to such changes are recommended which would allow for a performance and a prescription alternative. The performance exception would be a skylight that would automatically close when triggered by a combination of high winds and either high temperature or low relative humidity. (Industry currently provides skylights that automatically close when triggered by a rain event.) The prescriptive exception would require the existing ember penetration standard remain in place when the skylight is in the open position. Including the above-recommendations with respect to operable skylights in Chapter 7A provides the designers, owners, developers, building and fire officials, as well as subsequent homeowners, additional guidance in resisting wildland-urban interface fire exposure. Changes proposed for the CBC Chapter 7A will also be regulated within California Residential Code (CRC) Section R337, which is a mirrored section within the CRC

### 708A.4

**Rationale:**

- The focus of the paragraph is on controlling the door perimeter gap. Weather stripping is one means of controlling the gap. Thus, the heading should be "door perimeter gap".
- The two current sentences have been combined into one sentence for editorial clarification.
- Three methods of controlling gaps of up to 1/8-inch are described. Two are prescriptive and one is performance based. The performance based method would involve tensile strength and fire related performance.
- For tensile strength, acceptance criteria language is needed since neither ASTM G155 (accelerated weather test on non-metallic materials) nor ASTM D638 (tensile test on plastic materials) contain pass/fail criteria.
- For fire performance, the objective would be to limit weather stripping from contributing to the fire after encountering flying, embers as it closes gaps between garage doors and surrounding surfaces.

- Improved flammability testing can be determined through testing to UL 94. This standard contains a series of small-scale tests that evaluate the flammability of polymeric (plastic) materials, used for parts in devices and appliances, in response to a small, open flame heat source under controlled laboratory conditions.

- The UL 94 test is a simple and relatively inexpensive means of assessing the flammability of small materials, which could fit the description of weather stripping. UL 94 testing is intended for small plastic or rubber parts, typically those whose thickness does not exceed 1/2 inch (13 mm) or whose surface area does not exceed 10.74 square feet (1 square meter).

- UL 94 provides a method for rating the ignition characteristics of plastic or rubber materials. The flammability ratings are established using small-scale tests involve 5 inch by 1/2 inch samples, which are subjected to a 3/4 inch, 50 W Tirrell burner flame ignition source.

- Garage door industry preliminary research indicates that the flexible (plasticized) component of PVC weather stripping, comprising the "fin seal" resting against the perimeter jamb surface, achieves a V-2 rating when tested to UL 94. To achieve a V-2 flammability rating the test samples, placed vertically with the test flame impinging on the bottom of the sample, must extinguish within 30 seconds while not burning to the top clamp. Although drips of flaming particles are allowed, it should be noted that in a practical sense any dripping of flaming particles from weather stripping installed at a garage perimeter will fall onto a non-combustible surface which is the driveway.

- Specifying compliance to V-2 represents an improvement in the code.

#### **709A.4.2**

**Rationale:** This proposal corrects an error in the code. When referring to ASTM E2726 it is necessary to explicitly state the burning brand to be used, because ASTM E2726, which has no pass/fail criteria, also allows for the option of conducting the test with a Class A brand or with a Class B brand. On the other hand, the sustained deck assembly combustion test in SFM 12-7-A-4, which is the equivalent test, must be conducted with a Class A brand. The proposal takes the missing language contained in the California code when referring to SFM 12-7-A-4 and adds it where it is missing.

#### **709A.5**

**Rationale:** This proposal simply corrects an error in the code.

In item 7 the code says the material shall comply with the requirements of 709A.5 when using ASTM E2632. Then 709A.5 says the requirements are that the material needs to be tested to ASTM E2632 and nothing else. An ignition resistant material (per 704A.3) has to be tested to the extended ASTM E84 test for 30 minutes and have a flame spread index of 25 (and other requirements). This means that a material that complies with item 7 does not have to be an ignition-resistant material and the words "ignition-resistant" need to be eliminated from 709A.5

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#### **710A.2**

**Rationale:** Both long-term experience and the recent Northern California wildfires have demonstrated that burning embers originating in the areas on fire can travel long distances and are most likely going to affect horizontal surfaces. Therefore, it is not safe to exclude these assemblies from the requirements associated with those accessory structures that require a permit and are covered by section 710A.2 of the code.

Carports are being removed as it is already identified as a Group U occupancy and would comply with 701A.3

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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### **[Item 3. I-3 Work Group]**

The OSFM is proposing the modifications based on the recommendations of the I-3 Taskforce.

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

#### **508.3.3**

#### **Table 509**

#### **716.2.2.1**

#### **804.4.1**

#### **804.4.3**

#### **905.3.10**

#### **Table 1004.1.2**

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### 508.3.3

**Rationale:** Nonseparated occupancies is a design option that if the building is designed to the most restrictive and most hazardous conditions that are expected to occur based on the occupancies contained in the building, a fire resistance rated separation is not needed. The height and area limitations for those occupancies will be used to determine the required type of construction for each occupancy, with the most restrictive type of construction required for the entire building.

Nonseparation method is not permitted for Group H-2, H-3, H-4, H-5, I-2, I-2.1 and L. It is proposed that Group I-3 occupancies be included within this exception.

Exception 3 follows the method of accessory uses of the main occupancy to be allowed as non-separated.

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#### Table 509

**Rationale:**

California has more restrictive construction regulations for I-3, I-2 and I-2.1 occupancies already and providing rated separations between rooms is too restrictive.

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#### 716.2.2.1

**Rationale:**

Modify exception #5 to include speaker ports. It is believed that speaker ports do not pose any more threat than cuff ports.

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#### 804.4.1, 804.4.2, 804.4.3

**Rationale:** The code currently permits only noncombustible flooring in areas occupied by patients or inmates whose personal liberties are restrained in I-2 and I-3 occupancies. Historically, the concern regarding combustible flooring in institutional occupancies was attributable to interior finish and flooring materials contributing to fuel loads that reduce the amount of time for flashover to occur in a fire event. A more specific concern is fire in a room of origin spreading to the means of egress system via the interior and floor finish materials. In January 1972, the Green Nursing Home fire in Lincoln Heights, Ohio, killed 10 of the 41 residents; this single-story was not sprinklered and the interior finish materials accelerated fire spread. Limiting the combustibility of interior finish materials is thought to delay, or not significantly add to, the time a flashover will occur.

Prior to 1981, interior floor finish materials were tested in accordance with ASTM E84 (*Test for Surface Burning Characteristics of Building Materials*) as testing for critical radiant flux of floor covering did not yet exist, or had not yet been standardized. Primarily due to the lack of any standards, noncombustible flooring was required in the above occupancies.

Currently, ASTM E648 and NFPA 253 (*Standard Test Method for Critical Radiant Flux of Floor Covering Systems Using a Radiant Heat Energy Source*) are the standard tests used for determination of combustibility of floor finishes and floor coverings. This test was specifically developed to evaluate the tendency of a floor covering to propagate flame and contribute to fuel loading. The greater its critical radiant flux value, the greater the resistance of a floor finish to flame propagation.

It seems that permitting the use of flooring, tested with actual underlayment to be installed (not the standard test underlayment), that meets ASTM Standard E648, Class I, having a critical radiant flux limit of not less than 0.45 watt per centimeter square, and a specific optical density smoke rating not exceeding 450, per ASTM E662, in fully sprinklered buildings housing Group I-2 and I-3 occupancies in areas occupied by patients or inmates whose personal liberties are restrained, would be reasonable.

This also appears to coincide with NFPA 101 requirements.

To permit the use Class I flooring in I-2 and I-3 occupancies in areas occupied by patients or inmates whose personal liberties are restrained (in lieu of noncombustible floor finishes), the following criteria shall be met:

1.The Group I-2 and I-3 buildings shall be fully sprinklered;

2.The floor finish material shall be tested with the actual underlayment to be used – not a test underlayment material – and shall meet the ASTM Standard E648 for Class I materials, having a critical radiant flux limit of not less than 0.45 watt per centimeter square, and a specific optical density smoke rating not exceeding 450, per ASTM E662;

If the above criteria are not met, noncombustible flooring shall be used, in accordance with the charging section 804.4.3.

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**905.3.10**

**Rationale:** The proposal is to clarify where the standpipes are required, which is within the housing unit and housing pod. The reference to a cell complex is irrelevant to the requirement. The proposal is to clarify the definitions to match the 2016 intervening addition.

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**Table 1004.1.2**

**Rationale:** Table 1004 is used for egress purposes and number of exits. The addition of the I-3 uses are like other uses not within an I-3. The fire and life safety egress concern has not been reduced. Clarity and ease of use for the code user.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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**[Item 4. L Work Group]**

The OSFM is proposing the modifications based on the recommendation of the L-Occupancy Taskforce. The taskforce changes update the regulations to match changes that have occurred in the model code and to provide clarity in the regulations.

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

**202 LABORATORY SUITE****302.1****307.1.1****TABLE 307.1(1)****TABLE 307.1(2)****313.1****414.1.1****453.1****453.3.1****453.3.2****453.4.2****~~453.4.2.1~~****~~453.4.2.2~~****453.4.3.1****453.4.3.2****453.4.4****453.4.5****453.4.6****453.4.6.1****453.4.7.2****453.4.7.3****453.4.7.4.2****453.4.7.4.3****453.4.7.5****453.4.7.6****453.4.7.7****453.6.1**

**453.6.5**  
**~~453.7.1~~ 453.1.1**  
**~~453.7.21~~**  
**~~453.7.32~~**  
**TABLE 453.7.32.1**  
**~~453.7.43~~**  
**~~453.7.5~~**  
**453.8**  
**453.9**  
**TABLE 504.3<sup>a, i</sup>**  
**TABLE 506.2<sup>a, b, i</sup>**  
**TABLE 803.11**  
**903.2.16**  
**903.2.16.1**  
**903.2.5.4**  
**TABLE 903.2.11.6**  
**907.2.28**  
**907.2.28.1**  
**907.6.4**  
**TABLE 1004.1.2**  
**1006.2.1**  
**TABLE 1006.3.3(2)**  
**2702.2.17**

#### **LABORATORY SUITE**

**Rationale:** Revised text for clarification in the definition of the Laboratory Suite.

#### **302.1**

**Rationale:** Revised text for clarification, correlate the definition to the L occupancy.

#### **307.1.1**

**Rationale:** Revised text for clarification with a pointer to the appropriate section in the CFC.

#### **TABLE 307.1(1)**

**Rationale:** Revised text for clarification.

#### **TABLE 307.1(2)**

**Rationale:** Revised text for clarification

#### **313.1**

**Rationale:** Revised for language consistency in Code.

#### **414.1.1**

**Rationale:** Revised text for clarification.

#### **453.1**

**Rationale:** Reference correction and clarification that L occupancies are an optional design.

#### **453.3.1**

**Rationale:** Revised to match definition of "Floor Area, Gross" in Section 202.

#### **453.3.2**

**Rationale:** Revised text for clarification in Lab Suites with multiple tenants.

#### **453.4.2**

**Rationale:** Redundant Section. Already noted in CBC Table 1604.5.



**453.4.2.1**

**Rationale:** Redundant Section. Already noted in CBC Table 1604.5.

**453.4.2.2**

**Rationale:** Redundant Section. Already noted in CBC Table 1604.5.

**453.4.3.1**

**Rationale:** Revised for language consistency in Code.

**453.4.3.2**

**Rationale:** Revised for language consistency in Code.

**453.4.4**

**Rationale:** Purpose of this room is not well defined. Who owns it? Who stocks and maintains the supplies? Many feel it just takes up valuable space. However, others felt that some fire code officials might want these areas for staging. Section revised to leave requirement for fire code official to decide per project.

**453.4.5**

**Rationale:** Replace "present" to match text in other parts of the Code. "Integral coved base" addresses the issue of flooring termination at walls.

**453.4.6**

**Rationale:** Revised for compliance with NFPA 110 and create consistency.

**453.4.6.1**

**Rationale:**

1. "Emergency" replaced with "Standby" to coordinate with Section 453.4.6 revision.
2. "Emergency alarm and monitoring system", and "Egress lighting" removed because already covered in CEC.
3. ERRCS added to with correlate with the new regulations.

**453.4.7.2**

**Rationale:** Remove "product conveying and others" for clarification that all exhaust from "L" Occupancy should be continuous, unimpeded, and unobstructed.

**453.4.7.3**

**Rationale:** Redundant. CMC covers this already.

**453.4.7.4.2**

**Rationale:** Code conflict and potentially causes a hazardous condition in the building.

**453.4.7.4.3**

**Rationale:** Reference correction and removal of "2 hour" because already covered in Section 713.

**453.4.7.5**

**Rationale:** Added clarification.

**453.4.7.6**

**Rationale:** Deleted because it conflicts with 453.4.7.5.

**453.4.7.7**

**Rationale:** Reference correction.

**453.6.1**

**Rationale:**

1. Section number correction.
2. The word "portion" can be used for an alcove or area off a main lab. The word "room" resolves this issue.

**453.6.5**

**Rationale:** Delete because section is redundant. Already covered in CBC Table 1020.1.

**453.1.1**

**Rationale:** No change to text, but move to front of section, because typically missed by designers.

**453.7.1**

**Rationale:** Add additional reference for clarification.

**453.7.2.1**

**Rationale:** Add additional reference for clarification.

**TABLE 453.7.2.1**

**Rationale:** Clarification of the table for storage and correlation with the CFC.

**453.7.4**

**Rationale:** Section number correction.

**453.7.5**

**Rationale:** Delete because this is Fire Code and not Building Code issue. CFC Section 5003.10.

**453.8**

**Rationale:** Revised for language consistency in Code

**453.9**

**Rationale:** Clarification to how to deal with existing "H-8" Occupancies. There are some Higher Education facilities that are maintaining existing "H-8" Occupancies.

**TABLE 504.3 <sup>a, i</sup>**

**Rationale:** Text "and all Group L" added for clarification that sprinklers required in all, not just new, Group L Occupancies

**TABLE 506.2<sup>a, b, i</sup>**

**Rationale:** Clarification that sprinklers required in L Occupancies

**TABLE 803.11**

**Rationale:** In the H, L row under "NONSPRINKLERED" all three (3) columns should be changed to NP, because H and L Occupancies are not allowed in Non-Sprinklered buildings.

**903.2.16**

**Rationale:** Revised to clarify that only the "L" Occupancy portions of a floor are required to be designed with a higher sprinkler density, and the remainder of the building shall be designed in accordance with the nature of the hazard imposed by the occupancy and consistent with NFPA 13.

**903.2.16.1**

**Rationale:** Revised for consistency in Code.

**903.2.5.4**

**Rationale:** Revised for consistency in Code.

**TABLE 903.2.11.6**

**Rationale:** Revised for consistency in Code.

**907.2.28**

**Rationale:** Revised for consistency in Code. This is same wording as the sprinkler requirements in Section 903.2.16. Separate into two paragraphs, because two different points.

**907.2.28.1**

**Rationale:** Revised for consistency in Code.

**907.6.4**

**Rationale:** Revised for consistency in Code.

**TABLE 1004.1.2**

**Rationale:** Add (K-12) after "Educational" Clarification that "Educational is for K-12 only and not L occupancy laboratories.

**1006.2.1**

**Rationale:** Fill in the 3 blank cells - Add "NP" in the two "Without Sprinkler System (feet)" columns. Add "75<sup>a</sup>" in "With Sprinkler System (feet)" column.

**TABLE 1006.3.3(2)**

**Rationale:** Common Path of Travel for "L" Occupancies was not addressed in this Table. This needs to be changed in conjunction with proposed change to Table 1006.2.1.

**2702.2.17**

**Rationale:** Revised for compliance with NFPA 110, and to correspond with proposed revision to Section 453.4.6.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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**[Item 5. Higher Education]**

The OSFM is proposing to remove Section 428 and all references to higher education laboratories in its entirety until it can be evaluated for its allowance of hazardous material in high-rises and how this affects the Group L occupancy. California currently has the Group L occupancies that addresses the issues of laboratories in high-rises and it does not restrict the occupancy to higher education. The adoption of Section 428 can create conflict in the regulations and terminology for Group L and Higher Education Laboratories. The fire service has voiced concern on how these new regulations will affect the state. The OSFM will create a taskforce to evaluate the impact of the regulations and to make recommendations to the Office of the State Fire Marshal.

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

**Table of Contents**

**202 ~~[F] HIGHER EDUCATION LABORATORY.~~**

**307.1.1**

**414.2**

**Section 428**

**Index**

**Table of Contents**

**Rationale:** Remove for consistency in removing Section 428 from the code.

**202 Definitions**

**Rationale:** Remove for consistency in removing Section 428 from the code.

**307.1.1**

**Rationale:** Remove for consistency in removing Section 428 from the code.

#### 414.2

**Rationale:** Remove for consistency in removing Section 428 from the code.

#### SECTION 428

**Rationale:** The OSFM is proposing to remove Section 428 and all references to higher education laboratories in its entirety until it can be evaluated for its allowance of hazardous material in high-rises and how this affects the Group L occupancy. California currently has the Group L occupancies that addresses the issues of laboratories in high-rises and it does not restrict the occupancy to higher education. The adoption of Section 428 can create conflict in the regulations and terminology for Group L and Higher Education Laboratories. The fire service has voiced concern on how these new regulations will affect the state. The OSFM will create a taskforce to evaluate the impact of the regulations and to make recommendations to the Office of the State Fire Marshal.

#### INDEX

**Rationale:** Remove for consistency in removing Section 428 from the code.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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#### [Item 6. R-2.2 based on SB112]

This is to meet the requirements of the Legislature for SB 112 to create Community Correctional Reentry Centers - California Department of Corrections and Rehabilitation (CDCR) - community-located facilities that provide housing and transitional rehabilitative or community-based programming services for ambulatory inmates. CDCR Program services assist with substance use disorder treatment, employment, education, family reunification, and social support. Program participants remain under the jurisdiction of CDCR, are monitored by CDCR staff and supervised by CDCR approved/contracted program providers 24/7. The facilities include residential living, food services, administrative and program functional spaces in a non-licensed 24 hr.

[from SB 112 approved by Governor, September 28, 2017. Filed with the Secretary of State September 28, 2017.]  
SEC. 7. Section 13143.7 is added to the Health and Safety Code, to read:

#### 13143.7

(a) Except as provided in Section 18930, the State Fire Marshal, in consultation with the Department of Corrections and Rehabilitation, shall prepare and adopt regulations establishing minimum standards for the prevention of fire and for the protection of life and property against fire in any building or structure used or intended for use as a community correctional reentry facility, as defined in Section 6258 of the Penal Code. The State Fire Marshal shall adopt and submit building standards for approval pursuant to the provisions of Chapter 4 (commencing with Section 18935) of Part 2.5 of Division 13 for the purposes described in this section.

(b) The regulations and building standards developed pursuant to subdivision (a) shall also address buildings and structures that provide residential housing for parolees under contract with the Department of Corrections and Rehabilitation.

Fire Protection enhanced features include:

- CDCR Reentry facilities are supervised and monitored by CDCR custody and program staff 24/7
- Daily operations include an onsite electronic surveillance (CCTV) system, cameras cover public areas within the building and its perimeter.
- Facility is protected with NFPA 13 automatic fire suppression system with quick response heads.
- There is an NFPA 72 compliant automatic fire alarm & smoke detection system reporting to a U.L. listed Central station. There is a manual pull station at the continuously manned Watch Office for non-fire emergencies.
- There are at least 2 smoke compartments on each story/floor area delineating sleeping unit/s areas.

- In older existing buildings; second means of egress to a public way utilizing an OSFM approved and inspected fire escape system.

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

**202 Definitions**

**310.3.2**

**310.4**

**Section 420 Title**

**420.1**

**420.4**

**420.5**

**420.6**

**420.6.1**

**420.6.2**

**420.11**

**Table 504.3**

**Table 504.4**

**Table 506.2**

**508.2.4**

**508.3.3**

**510.5**

**510.6**

**Table 706.4**

**708.4.2**

**3006.2**

**Chapter 2 Definitions** *Community Correctional Reentry Centers - California Department of Corrections and Rehabilitation (CDCR):*

**Rationale:** OSFM to propose a new definition for a new occupancy classification based on the mandates from Health and Safety Code 13143.7.

**310.3.2**

**Rationale:**

OSFM to propose a new occupancy classification based on the mandates from Health and Safety Code 13143.7.

**310.4**

**Rationale:** Revised for addition of new occupancy group.

**SECTION 420 Title**

**Rationale:** Revised for addition of new occupancy group.

**420.1**

**Rationale:** Revised for addition of new occupancy group.

**420.4**

**Rationale:** Revised for addition of new occupancy group.

**420.5**

**Rationale:** Revised for addition of new occupancy group with additional requirements.

**420.6**

**Rationale:** Modify section number.

**420.6.1**

**Rationale:** Added for new occupancy group requirements.

**420.6.2**

**Rationale:** Modify section number.

**420.11**

**Rationale:** Added for new occupancy group requirements.

**TABLE 504.3**

**Rationale:** Added for new occupancy group requirements and ease for code user.

**TABLE 504.4**

**Rationale:** Added for new occupancy group requirements and ease for code user.

**TABLE 506.2**

**Rationale:** Added for new occupancy group requirements and ease for code user.

**508.2.4**

**Rationale:** Revised for addition of new occupancy group.

**508.3.3**

**Rationale:** Revised for addition of new occupancy group.

**510.5**

**Rationale:** Revised for addition of new occupancy group.

**510.6**

**Rationale:** Revised for addition of new occupancy group.

**TABLE 706.4**

**Rationale:** Revised for addition of new occupancy group.

**708.4.2**

**Rationale:** Revised for addition of new occupancy group.

**3006.2**

**Rationale:** Revised for addition of new occupancy group.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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**[Item 7. Stairway Capacity]**

The OSFM is proposing to remove California amendment exception #5.

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

**1005.3.1**

**1005.3.1**

**Rationale:** The current California amendment references section 1029. The model code removed the reference to stairs, so the amendment is confusing. The California amendment allowed a reduction based on a smoke protection that was in 1029. The model code now allows a similar reduction based on a voice evacuation system. The removal of California amendment #5 is adopts the model code language and provide clarity.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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#### **[Item 8. Balcony and Elevated Walking Surfaces]**

Following the Berkeley balcony collapse of 2015, the California Building Standards Commission (CBSC) formed an ad hoc subcommittee comprised of two members (Commissioners Kent Sasaki and Steven Winkel). The purpose of this subcommittee is to review reports and other information regarding failures of this type and to possibly make regulatory or statutory recommendations to the CBSC and/or state agencies that have authority to amend the California Building Standards Code (Cal. Code Regs., Title 24).

#### **Legislative**

#### **Mandate**

On September 15, 2016, Governor Edmond G. Brown Jr. approved [Senate Bill No. 465 Hill \(Chapter 372, Statutes of 2016\)](#).

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

#### **705.2.3.2**

#### **705.2.3.2**

**Rationale:** The new section meets the intent of the work group's purpose. The proposal allows vent is combustible exterior element such as balconies, but maintains the fire integrity of the exterior wall. If the building is in a WUI area the vents must meet the Chapter 7A requirements to protect against embers from a wildland fire.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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#### **[Item 9. Secondary Attachments to steel]**

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

#### **704.6.1**

#### **704.6.1**

**Rationale:** Primary structural frame members shall comply with Table 601 for fire resistance rating. Secondary (non-structural) steel tubes provide support for a building's exterior curtain wall and are thereby considered to be unrated members that do not require any fire protection. The connection of non-structural tubes to primary structural members has potentially adverse thermal effects on the required fire resistance rating of the primary steel frame members. Building attachments for miscellaneous non-structural items (hangers, braces, framing tracks, erection lifting lugs, wall supports, etc.) are typically not required to be individually fire protected. In addition, fire resistance rated assemblies are tested without attachments, and with a homogeneous and continuous protection system or material. Thus, rated assemblies are explicitly limited to only the tested or approved components given in the published listing, which does not include bare steel attachments or discontinuous member protection. If such secondary steel attachments are connected to a fire resistance rated steel assembly, they may jeopardize the assembly's rating and protection system by the introduction of "thermal shorts", which can cause unexpected and excessive heat conduction, convection, or radiation through the attachment or its connection to the primary assembly. The proposal to require a 12-inch extension of fireproofing on all non-structural attachments is based on a general industry practice as described in ANSI/UL 263 BXUV (exhibit C). Moreover, in cases where an open tubular steel connection is utilized it is vital that the interior surfaces of the tube walls are fireproofed and the bottom ends of

the tubes are closed. Without this protection, this condition results in bare (unprotected) steel areas at the attachment that could be directly exposed to radiant and convective heat from a fire source. A modeling analysis of a high-rise project in Stockton, CA prepared by Jensen Hughes Senior Engineers Nestor Iwankiw and Thomas Forsythe further supports the proposed code change that would require fire proofing of secondary non-structural attachments. Under the current code, fire-proofing requirements for non-structural attachments and their connections remain ambiguous. This lack of clarity makes fire protection enforcement difficult due to increased construction costs for contractors, builders and owners. Furthermore, special inspectors, fire and building officials are not taught to look for these deficiencies, resulting in numerous buildings with unprotected steel that can potentially have serious implications on public safety and welfare. The proposal establishes a legal basis for requiring the additional fire protection as described herein.

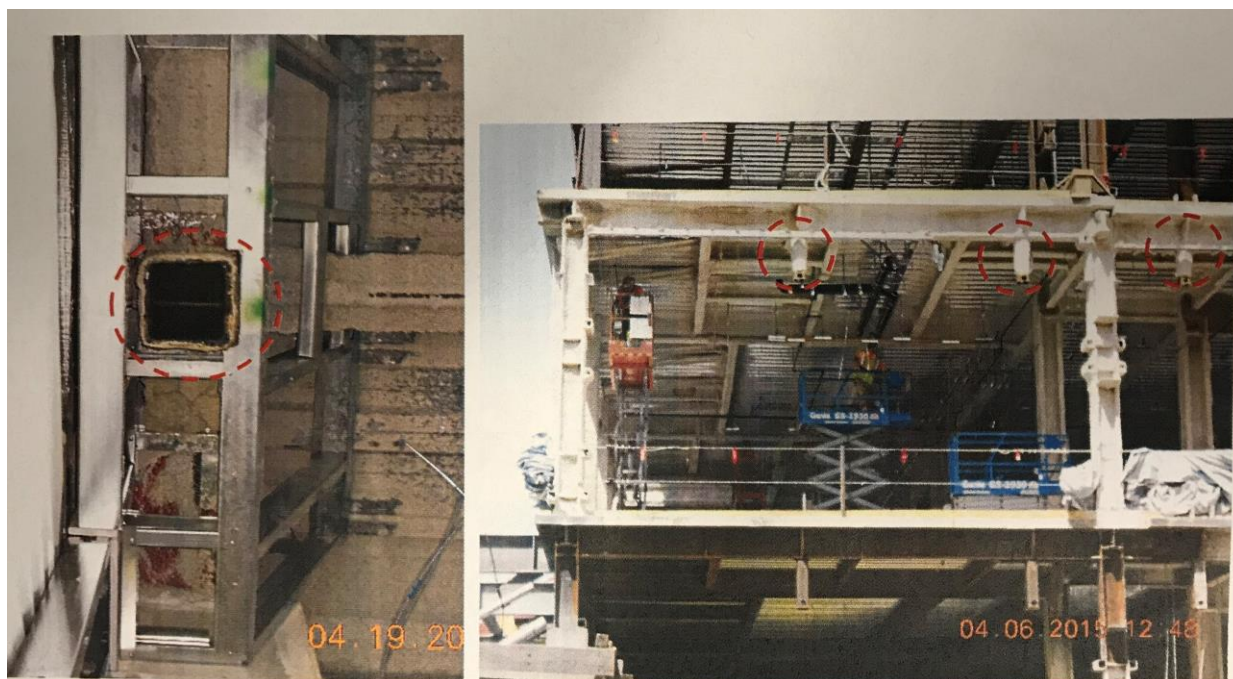


Figure 2: Photos of Incompletely Protected and Open Steel Tube Attachments to Primary Beams

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

#### **[Item 10. Elevators]**

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

**3007.1**  
**3008.1.1**  
**3008.2.1**  
**3008.8.1**

#### **3007.1**

**Rationale:** The IBC's change to only require Fire Service Access Elevators to the lowest level of fire department



vehicle access takes away a valuable firefighting and rescue tool. The whole idea when you have a fire emergency is to give the firefighters the best and safest tools possible and let them make the operational decisions.

Fire Service Access Elevators are protected from fire, smoke, water and heat. These elevators are designed to pass through fire floors regardless of the location of the fire. This unique safety design gives the Firefighters a very safe tool to fight fires and rescue occupants above ground and below ground.

The OSFM is proposing to maintain current regulations to allow local fire and rescue department the choice to include the Fire Service Access Elevator as a tool in their operations when warranted.

#### **3008.1.1**

##### **Rationale:**

The IBC's change to require only one occupant evacuation elevator while reducing the number of exit stairs by one. One occupant evacuation elevator does not accommodate the same number of occupants as one exit stairs. The reduction of the number of exits is a large reduction of the exiting capacity.

The OSFM is proposing to allow the current occupant evacuation elevators but to remove the new section that allows a further reduction in the number of occupant evacuation elevators.

#### **3008.2.1**

**Rationale:** Editorial. Adding the italics.

#### **3008.8.1**

**Rationale:** Correlation with change is section 3008.1.1

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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### **[Item 11. Carbon Monoxide]**

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

#### **915.1**

#### **915.2.3**

#### **915.4.2**

**Rationale:** The proposals are to provide clarity and enact the regulations that are consistent with the statute found in Education Code 32080. UL 2034 is a standard for residential detectors and this provides clarity.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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### **[Item 12. Class A Wiring in High Rise Buildings]**

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

#### **907.6.1.1**

**Rationale:** SFM is modifying #1 in this existing amendment based on recommendations from the OSFM Fire Alarm Advisory Committee.

This modification will now only require Class A circuits for fire alarm “riser circuits” in high-rise buildings, and not fire alarm circuits on floors throughout the building. SFM feels that the existing provisions of the amendment requiring Class A fire alarm circuits throughout all floors of high-rise buildings is overly restrictive when combined with the circuit and pathway requirements contained in the 2016 Edition of NFPA 72 National Fire Alarm and Signaling Code. “Class X Circuits” are being added to the existing amendment as a design option, where the fire alarm designer and building owner would like to use circuit isolators for the riser circuits installed in accordance with NFPA 72. Class X fire alarm circuits meet all the requirements of Class A circuits.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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#### **[Item 13. Fire Command Center]**

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

##### **911.1.2**

**Rationale:** The model code lowered the fire protection of the fire command center to one hour. The proposal is to maintain the existing standard of two-hour protection to maintain a safe level of protection for the fire service during a fire event.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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#### **[Item 14. Assembly occupant loads 100-300]**

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

##### **1029.3.1**

**Rationale:** The OSFM is proposing to remove the California amendment. The changes in the model code have made this amendment unnecessary.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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#### **[Item 15. NFPA 13 Waterflow test]**

The specific purpose and Rationale of each adoption, amendment, or repeal is as follows:

### 23.2.1.1\*

**Rationale:** The OSFM is proposing to amend NFPA 13 to require the waterflow test for designing a fire sprinkler system to be conducted within 6 months of plan review. New construction can affect the water flow supply by adding additional demands. A longer time that a flow test is valid does not capture other new project that have been built in the last year as the current regulation require. This change will provide more accurate design supply information for fire suppression systems. This will also correlate to many fire department current practices.

The actions described above are reasonably necessary to carry out the purpose for which it is proposed. The Rationale for these actions is to establish minimum requirements for the prevention of fire and for the protection of life and property against fire and panic in occupancies that are addressed in the 2018 International Building Code and published as the 2019 California Building Code pursuant to Health and Safety Code Section 12000 through 12401 and 12500 through 12725, 13108, 13113, 13114, 13131.5, 13143, 17921, and 18949.2.

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### TECHNICAL, THEORETICAL, AND EMPIRICAL STUDY, REPORT, OR SIMILAR DOCUMENTS:

(Government Code Section 11346.2(b)(3)) requires an identification of each technical, theoretical, and empirical study, report, or similar document, if any, upon which the agency relies in proposing the regulation(s).

The SFM did not rely on any technical, theoretical, and empirical study, report, or similar documents outside of those contained in this rulemaking in proposing that CBSC adopt said model code as a reference standard for the placement of existing SFM regulatory amendments for the California Building Standards Codes.

### STATEMENT OF JUSTIFICATION FOR PRESCRIPTIVE STANDARDS:

(Government Code Section 11346.2(b)(1)) requires a statement of the reasons why an agency believes any mandates for specific technologies or equipment or prescriptive standards are required.)

The SFM believes that the amendments to the model code any additional building standards proposed are offered in typically both a prescriptive and performance base. The nature and format of the model code adopted by reference afford for both methods, the following is a general overview of the model codes proposed to be adopted by reference as well as state modifications:

This comprehensive fire code establishes minimum regulations for fire prevention and fire protection systems using prescriptive and performance-related provisions. It is founded on broad-based principles that make possible the use of new materials and new system designs.

This code is founded on principles intended to establish provisions consistent with the scope of a building and fire code that adequately protects public health, safety and welfare; provisions that do not unnecessarily increase construction costs; provisions that do not restrict the use of new materials, products or methods of construction; and provisions that do not give preferential treatment to particular types or classes of materials, products or methods of construction.

The International Building, Residential and Fire Code provisions provide many benefits, among which is the model code development process that offers an international forum for building and fire safety professionals to discuss performance and prescriptive code requirements. This forum provides an excellent arena to debate proposed revisions. This model code also encourages international consistency in the application of provisions.

### CONSIDERATION OF REASONABLE ALTERNATIVES

(Government Code Section 11346.2(b)(4)(A)) requires a description of reasonable alternatives to the regulation and the agency's reasons for rejecting those alternatives. In the case of a regulation that would mandate the use of specific technologies or equipment or prescribe specific action or procedures, the imposition of performance standards shall be considered as an alternate. It is not the intent of this paragraph to require the agency to artificially construct alternatives or describe unreasonable alternatives.)

The SFM has determined that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected

private persons than the proposed adoption by reference with SFM amendments. Therefore, there are no alternatives available to the SFM regarding the proposed adoption of this code.

**REASONABLE ALTERNATIVES THE AGENCY HAS IDENTIFIED THAT WOULD LESSEN ANY ADVERSE IMPACT ON SMALL BUSINESS.**

(Government Code Section 11346.2(b)(4)(B)) requires a description of any reasonable alternatives that have been identified or that have otherwise been identified and brought to the attention of the agency that would lessen any adverse impact on small business.)

The SFM has determined that no alternative considered would be more effective in carrying out the purpose for which the regulation is proposed or would be as effective and less burdensome to affected private persons than the proposed adoption by reference with SFM amendments. Therefore, there are no alternatives available to the SFM regarding the proposed adoption of this code.

**FACTS, EVIDENCE, DOCUMENTS, TESTIMONY, OR OTHER EVIDENCE OF NO SIGNIFICANT ADVERSE IMPACT ON BUSINESS.**

(Government Code Section 11346.2(b)(5)(A)) requires the facts, evidence, documents, testimony, or other evidence on which the agency relies to support an initial determination that the action will not have a significant adverse economic impact on business)

The SFM has made a determination that this proposed action will not have a significant adverse economic impact on business. Health and Safety Code Section 18928 requires the SFM, when proposing the adoption of a model code, national standard, or specification shall reference the most recent edition of the applicable model code, national standard, or specification. Therefore, there are no other facts, evidence, documents, testimony, or other evidence on which the SFM relies to support this rulemaking.

**ASSESSMENT OF EFFECT OF REGULATIONS UPON JOBS AND BUSINESS EXPANSION, ELIMINATION OR CREATION**

(Government Code Sections 11346.3(b)(1) and 11346.5(a)(10))

The [STATE AGENCY NAME] has assessed whether or not and to what extent this proposal will affect the following:

- X      The creation or elimination of jobs within the State of California.  
  
             These regulations will not affect the creation, or cause the elimination, of jobs within the State of California.
- X      The creation of new businesses or the elimination of existing businesses within the State of California.  
  
             These regulations will not affect the creation or the elimination of existing business within the State of California.
- X      The expansion of businesses currently doing business with the State of California.  
  
             These regulations will not affect the expansion of businesses currently doing business within the State of California.
- X      The benefits of the regulation to the health and welfare of California residents, worker safety, and the state's environment.  
  
             These regulations will update and improve minimum existing building standards, which will provide increased protection of public health and safety, worker safety and the environment.

**ESTIMATED COST OF COMPLIANCE, ESTIMATED POTENTIAL BENEFITS, AND RELATED ASSUMPTIONS USED FOR BUILDING STANDARDS**

(Government Code Section 11346.2(b)(5)(B)(i)) states if a proposed regulation is a building standard, the initial statement of reasons shall include the estimated cost of compliance, the estimated potential benefits, and the related assumptions used to determine the estimates.)

- No increased cost of compliance for those regulations that make only technical and non-substantive changes.
- The potential benefits provide recognition and appropriate use of new technologies and materials, clarity for the code users and local enforcement agencies, and may increase business due to the adoption of new building standards.
- Protection of life and property against fire and panic.

#### **DUPLICATION OR CONFLICTS WITH FEDERAL REGULATIONS**

(Government Code Section 11346.2(b)(6)) requires a department, board, or commission within the Environmental Protection Agency, the Resources Agency, or the Office of the State Fire Marshal to describe its efforts, in connection with a proposed rulemaking action, to avoid unnecessary duplication or conflicts with federal regulations contained in the Code of Federal Regulations addressing the same issues. These agencies may adopt regulations different from these federal regulations upon a finding of one or more of the following justifications: (A) The differing state regulations are authorized by law and/or (B) The cost of differing state regulations is justified by the benefit to human health, public safety, public welfare, or the environment.)

The SFM has determined that this proposed rulemaking action does not unnecessarily duplicate or conflict with federal regulations contained in the Code of Federal Regulations that address the same issues as this proposed rulemaking.